Title of proposal	Responsible AI with IoT-driven Digital Twins in Computing Curricula (RADIATE)
Name(s) and institution(s) of Awardee	Professor Berk Canberk, Edinburgh Napier University
Date of Award	25 November 2025
Amount of Award	£4,988.96
Description	This project addresses the growing need to integrate Responsible AI principles into Computing curricula, with a particular focus on the Internet of Things (IoT) and Digital Twins (DTs). While IoT is commonly taught and DT technology is increasingly included in UK universities, their intersection with AI is often presented in purely technical terms. This narrow approach overlooks critical issues, including fairness, accountability, and transparency. To address this, the project will conduct a UK-wide survey of Computing departments to map current practices in teaching IoT, DTs, and Responsible AI. The findings will identify gaps, challenges, and opportunities in providing hands-on student experiences that combine technical knowledge of IoT, DT, and AI with ethical reflection. Based on this evidence, the project will develop a set of scenario-based classroom exercises, including examples like smart rooms, healthcare monitoring, and energy optimisation. In this way, students will be able to explore both the potential and the risks of AI-enabled DTs through practical experiences. The outcomes will be published as a teaching guide, offering best practices for computing educators across the UK.

Title of proposal	A Stage-Based AI Learning Environment for Novice Students
Name(s) and institution(s) of Awardee	Marc Kydd, Abertay University & Dr Joseph El Gemayel, Strathclyde University
Date of Award	4 December 2025
Amount of Award	£2,041.88
Description	As AI systems continue to see greater adoption in daily life, it is imperative that the computing science students of today, who will one day be maintaining such systems, meaningfully understand how AI systems operate and their associated risks and benefits. Despite the growing demand for AI-centred jobs, there is currently a gap present for a one-stop platform able to guide students, through hands-on experience, from novice to AI expert in a self-directed manner. In order to allow students to explore AI concepts at their own pace and receive supported guidance in their learning journey, this project proposes an interactive online AI learning environment web application where users can engage and experiment with the components of a neural network or other such AI model

	architectures. Rather than simply providing access to the features of a neural network without context or explanation, or the static linear contents of a textbook; the project proposes a structured interactive online learning environment through a web application, for students to explore and engage with. The expected outcome of this project is a flexible means of educating students about AI in a hands-on manner; supporting them as they work through the platform. Upon completion, students will be able to confidently understand and operate AI systems, meeting the growing need for such skillsets in industry.

Title of proposal	Empowering Neurodiverse Learners in Computer Science: A Personalised AI Framework for Dyslexic Students
Name(s) and institution(s) of Awardee	Dr James Ohene-Djan, Goldsmiths, University of London
Date of Award	4 December 2025
Amount of Award	£4,680
Description	Universities are increasingly using AI tools in computer science teaching, yet little attention has been given to how these technologies can be personalised for neurodiverse learners. Students with dyslexia often struggle with the specific demands of computing tasks—reading code, understanding algorithms, structuring technical explanations, and producing clear documentation. Existing support mainly focuses on general literacy and does not address the cognitive load and abstract reasoning required in CS. This project directly tackles that gap by developing and testing a personalised AI framework designed for dyslexic learners studying computer science. The project will create and evaluate targeted AI strategies—such as simplified problem statements, step-by-step code explanations, and guided commenting—to reduce barriers and improve comprehension. A four-week pilot with undergraduate learners, supported by specialist evaluation, will inform a final practitioner toolkit. The toolkit will give computing educators a practical, evidence-based model for inclusive and responsible AI integration, improving access, confidence, and outcomes for neurodiverse learners.